

30 January 2023

DECEMBER 2022 QUARTERLY ACTIVITIES REPORT

HIGHLIGHTS

POSITIVE FINANCIAL INVESTMENT DECISION TO RESTART THE LANCE URANIUM PROJECT OPERATIONS

- The Board of Directors made a positive Financial Investment Decision (“FID”) to restart uranium operations at the Lance Projects
- Lance production preparation activities commenced in Q1 of CY2023, with deliveries to existing customers starting in Q4 of CY2023
- Peninsula remains debt-free and retains uranium inventory and together, these factors provide financial flexibility for the funding of operations and other activities
- Peninsula is in a strong position to provide new uranium supply to the growing nuclear fuel markets, as Lance becomes fully operational

SUCCESSFUL COMPLETION OF A\$32M PLACEMENT AND A\$0.9M SPP

- A fully underwritten A\$32 million institutional placement was completed to fund restart of operations
- Placement attracted significant demand from both existing and new international and domestic sophisticated and institutional investors
- A Share Purchase Plan (“SPP”) was also completed raising A\$0.9 million
- The Placement and SPP shares were priced at A\$0.131 per share, which represented a 15.5% discount to the closing price on 23 November 2022 and a 23.2% discount to the 20-day volume weighted average (“VWAP”)

PENINSULA AWARDED SUPPLY CONTRACT FOR US STRATEGIC URANIUM RESERVE

- Awarded a contract between Peninsula subsidiary Strata and the US Department of Energy (DOE) to supply 300,000 pounds of US origin U₃O₈ for the Uranium Reserve
- The US\$75 million Uranium Reserve was established by Congress in 2020
- The agreed pricing is above current reported spot and term pricing benchmarks, providing encouragement and support of sustainable production from US mines

END-OF-YEAR UPDATE

- Lance Projects phased approach to production restart implemented
- Planning underway for drill programmes at Kendrick and Barber

CORPORATE

- Available cash of US\$25.1 million on 31 December 2022
- Uranium inventory valued at US\$24.5 million, consisting of ~510,000 pounds at the quarter-end price of US\$48.00 per pound (UxC)

LANCE PROJECTS, WYOMING

Peninsula to Restart Operations at the Lance Uranium Project

Peninsula delivered a major milestone in November, with the Board making a positive FID to restart uranium operations at the Company’s Flagship Lance Projects (“**Lance**”) located in Wyoming, USA.

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Lance holds a JORC (2012) Resource¹ of 53.7 Mlb U₃O₈, which constitutes one of the largest uranium production-development projects in the United States. Lance is the only uranium ISR project situated in the United States that is fully permitted to utilise the low-pH ISR recovery process.

Peninsula has been methodically progressing key technical and economic activities to transition Lance into a low-pH ISR operation. Prior to making the FID, Peninsula completed a Definitive Feasibility Study (“DFS”) covering the Ross and Kendrick Areas with results highlighting the potential for Lance to be a globally competitive uranium operation. The excellent results from the DFS provided the Company and Board with a high-level of confidence to proceed with the positive decision to restart Lance, with operations set to commence in Q1 2023.

The Company is bringing Lance back online at a time when the global recognition and importance of uranium is gaining momentum, due to the critical role nuclear power will play in meeting aggressive decarbonisation targets. Importantly, Peninsula will be well-positioned to provide supply into a growing, supply-constrained market once Lance becomes operational.

End-of-Year Update

Corporate Overview

At 31-December 2022 the Company balance sheet reflected a cash balance of US\$25.1 million plus uranium inventory consisting of ~510,000 pounds. The Company does not carry any long-term debt.

The Company acquired 200,000 pounds of U₃O₈ from the market at the end of December 2022 in anticipation of 1Q CY2023 sales of 500,000 pounds. Sales are scheduled with the US DOE (300,000 pounds) and with existing customers (200,000 pounds). The payment for the acquired 200,000 pounds of U₃O₈ has been scheduled to occur in 1Q CY2023 to align with the sales receipt from the US DOE.

The Company also holds a previously executed purchase contract with pricing below current spot market levels to acquire new inventory of 200,000 pounds late in 1Q CY2023.

Production Activities Update

The Lance Projects site team has been actively engaged in preparations to systematically return the Project to commercial production.

The Company completed the engineering and design work for the process changes required to transform the operations into a low-pH ISR facility. Items with longer lead-time have been ordered with deliveries expected during 1Q CY2023. Ongoing plant modifications are progressing with the expectation that the recovery plant modifications will be completed in advance of the date needed. Contractors for the facility modification works have been screened and pre-qualified. Bids are being solicited in January 2023.

Limited circulation of low pH solution and oxidant was established between Mine Unit 1 and the process plant in December. The production stream is being chemically fortified at the plant and returned to the well field where it is injected into uranium bearing horizons. No uranium will be recovered in the ion-exchange system until the production stream reaches chemical target objectives and the process plant modifications are completed. The flow rate of the circulating stream will be ramped up throughout 1Q CY2023, as equipment and supplies are received and installed at the site. Commercial uranium production grades within the pre-circulated wellfield areas are projected to be achieved by late 1Q CY 2023 and plant recovery operations will commence at that time.

Licensing Action

Peninsula’s wholly owned US subsidiary Strata Energy Inc (“Strata”) submitted applications with the Wyoming Department of Environmental Quality (“WDEQ”) that would expand the approved license area of the Lance Projects, with the inclusion of the Kendrick Production Area (“Kendrick”). An acceptance review of the amendment package documents will be conducted by the WDEQ as the next step of the

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regulatory process. The review and approval process for amendments of this nature are considered procedural and typically take eighteen to twenty-four months to complete.

The Company is currently fully authorized to conduct uranium In-Situ Recovery (“ISR”) operations within the defined boundaries of the Ross Production Area (“Ross”) of the district-scale Lance Projects (see Figure-1). Ross holds 5.9 million pounds of JORC (2012) compliant Measured, Indicated and Inferred U₃O₈ Resources¹, a licensed and constructed uranium ISR production facility and two fully developed mine units (or wellfields). A third mine unit is under development at Ross and the Company anticipates the area will hold four or five mining units when completed.

Applications have been lodged with the WDEQ Land Quality Division to expand the Permit to Mine area and with the WDEQ Uranium Recovery Program to expand the area covered under the Source Material License. The amended permits and licenses will incorporate the Kendrick Production Area. Kendrick is planned to be the next sequential production area at Lance after Ross. The Kendrick Production Area holds 15.9 million pounds of JORC (2012) compliant Measured, Indicated and Inferred U₃O₈ Resources¹.

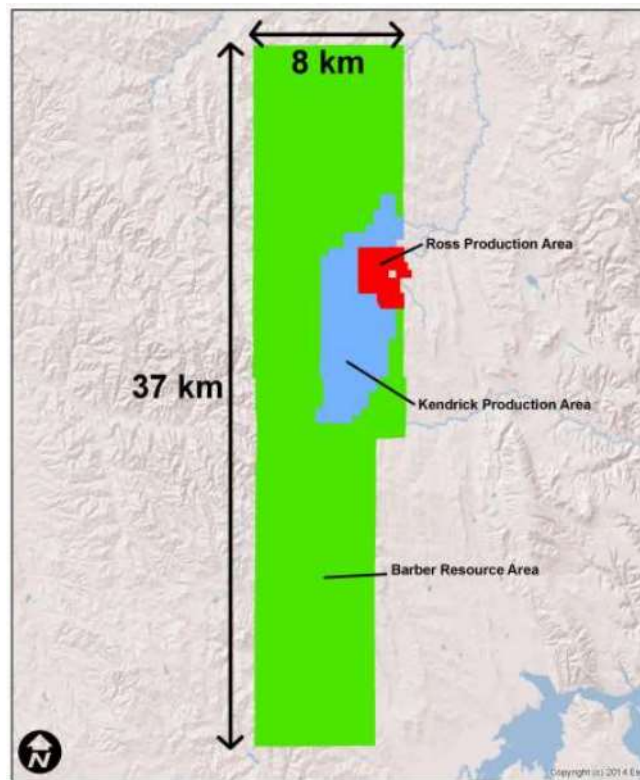


Figure 1: The Lance Projects

Resource Development

The Company has embarked on a programme to systematically expand and enhance the Lance Projects Resources. Including the Barber Resource Area (“Barber”), the Lance Projects’ JORC compliant mineral resource estimate stands at 53.7 million pounds of Measured, Indicated and Inferred U₃O₈ Resources¹.

A drilling programme is planned in 2023 to conduct resource quality enhancement drilling within Kendrick. Additional programmes have been designed within Barber to better define the mostly Inferred resources within the area with closer spaced drilling.

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CORPORATE

Successful Completion of A\$32m Placement

Peninsula completed an institutional placement (“Placement”) of new fully paid ordinary shares in Peninsula (“Placement Shares”).

The Placement raised A\$32 million (before costs) through the issue of approximately 244 million Placement Shares at an offer price of A\$0.131 per share. The offer represented a discount of 15.5% to the ASX closing price of Peninsula shares on 23 November 2022 of A\$0.155 and a 23.2% discount to the 20-day VWAP of A\$0.171 to the same date.

Peninsula received significant demand during the Placement bookbuild from high-quality existing and new sophisticated and institutional investors located in Australia and internationally.

The Placement settled on 2 December and shares were issued under the Company’s current placement capacity pursuant to ASX Listing Rules 7.1 and 7.1A and therefore were not subject to shareholder approval.

Canaccord Genuity (Australia) Limited was the Underwriter and Lead Manager to the Placement.

Share Purchase Plan Completed

In conjunction with the Placement, the Company launched a non-underwritten Share Purchase Plan (“SPP”) to eligible shareholders in Australia and New Zealand.

The SPP was offered at the Placement price of 13.1 cents per share by allowing eligible shareholders to each subscribe for up to A\$30,000 worth of new ordinary shares in the Company (SPP Shares).

The SPP closed on Friday 16 December 2022, with a total of 148 applications received and raised a total of A\$0.9 million.

The SPP Shares were issued to applicants on 21 December 2022 and the SPP Shares commenced trading on 22 December 2022.

The proceeds from both the Placement and SPP are being used to complete the ongoing works programme to transition the company’s flagship Lance Projects into a low-pH ISR process, to restart production operations within the Ross Production Area, and for the advancement of the Kendrick Production Area.

Peninsula Awarded Supply Contract for US Strategic Uranium Reserve

Peninsula and its 100% owned US subsidiary Strata were awarded a supply contract between Strata and the US DOE to provide domestically produced uranium concentrates to the US\$75 million Uranium Reserve established by Congress in 2020.

Under the supply award, Strata is to supply 300,000 pounds of US origin U₃O₈ for the Uranium Reserve.

Strata was a qualified supplier under the terms of the solicitation and provided an initial offer to the DOE in early August 2022. The DOE notified the successful suppliers on 15 December 2022 (US time).

The delivery will be satisfied with US origin material currently held in the accounts of Strata.

The agreed pricing is above current reported spot and term pricing benchmarks and is a strong signal the US government recognises that higher prices are needed to support sustainable production from US mines.

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Uranium Sales

Peninsula sold 50,000 pounds of U₃O₈ pursuant to a long-term sales contract during the quarter, at a realised cash price of US\$45.06 per pound, for total sales revenue of US\$2.253 million which was received during the quarter. The delivery was ultimately met from corresponding purchase agreements of 50,000 pounds of U₃O₈ which resulted in no impact to the uranium inventory balance.

In the March 2023 quarter, the Company has scheduled sales of 500,000 pounds U₃O₈ relating to both a 200,000-pound sales contract from its existing portfolio and the recently awarded 300,000 pound supply contract to the US DOE. A purchase agreement of 200,000 pounds of U₃O₈ in the March 2023 quarter will be used to maintain a uranium inventory balance.

Portfolio of Uranium Sales and Purchase Agreements

During the quarter the Company received a formal option exercise notice from one of its current customers. The option exercise increases the quantity of firmly committed pounds by a total of 750,000 pounds U₃O₈, to be sold during the calendar years 2024 through 2026, under a pricing structure that includes partial exposure to the spot market price. These deliveries may be satisfied with either company production or market-sourced material.

During the quarter the Company was awarded a supply contract between Strata and the US DOE to provide domestically produced uranium concentrates to the US\$75 million Uranium Reserve. Under the supply award, Strata is to supply 300,000 pounds of US origin U₃O₈ at a fixed price in 1Q CY2023.

At 31 December 2022 the Company's portfolio of uranium concentrate sale agreements is for sales volumes up to 4.85 million pounds U₃O₈, with 4.25 million pounds of firmly committed sales (Table 1) and up to 0.6 million pounds of optional sales remaining at the election of a customer (Table 2).

At 31 December 2022, pricing for the 4.25 million pounds of firmly committed sales is subject to a blend of base-escalated price structures and uranium market based pricing metrics, including both floor and ceiling price limits. The sales subject to a base-escalated price structure have a projected sales price average of US\$60 per pound. The remaining sales are structured with market-based prices which could range between a floor of US\$45 and a ceiling of US\$80 per pound U₃O₈.

31 December 2022 Summary of Committed Sale and Purchase Agreements		
Calendar Year	Committed Sale Pounds U ₃ O ₈	Committed Purchase Pounds U ₃ O ₈
2023	700,000	200,000
2024	650,000	-
2025	650,000	-
2026	650,000	-
2027	400,000	-
2028	400,000	-
2029	400,000	-
2030	400,000	-
TOTAL	4,250,000	200,000

Table 1: Committed Sale and Purchase Agreements

Of the 4.25 million pounds of firmly committed sales, 0.95 million pounds can be satisfied with market sourced material (“open origin”) and 0.3 million pounds is to be satisfied with US origin material. The balance of 3 million pounds is to be supplied from Company produced uranium, with deliveries starting in the second half of CY2023.

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The open origin deliveries scheduled in 1Q CY2023 have been fully hedged with fixed price uranium concentrate purchase commitments (refer Table 1). Purchased uranium will be received in allotments during the coming quarters with the purchase timing closely aligned with the timing of deliveries to customers. The agreed purchase pricing is fixed and payment terms for the purchased uranium are also aligned closely with the receipt of proceeds from the sales.

The US origin deliveries scheduled in 1Q CY2023 will be sourced from uranium inventory on hand on 31 December 2022, which have been increased during the quarter.

The combined portfolio of committed uranium concentrates sale and purchase agreements and associated uranium inventory underpin a forecast net cash margin of US\$2.9 million to US\$3.0 million on secured uranium sales in H1 CY2023 based on the difference between the fixed purchase price or uranium inventory cost and the likely sales price based on the customer agreements.

31 December 2022 Summary of Customer Option Agreement ⁽¹⁾ :	
Calendar Year	Maximum Pounds U ₃ O ₈
2024	200,000
2025	200,000
2026	200,000
TOTAL	600,000

Table 2: Customer Option Agreements

- (1) The option agreement pounds of U₃O₈ relate to the maximum pounds optional at the election of the customer under contract. The option has an exercise date prior to the end of 1Q CY2023.

At 31 December 2022, the average pricing for the unexercised customer option agreement is projected to be \$44 per pound.

Uranium Inventory

At 31 December 2022 Peninsula holds legal title to 510,000 pounds of U₃O₈ at converter accounts, which is 200,000 pounds higher than the balance at 30 September 2022.

The Company acquired 200,000 pounds of U₃O₈ from the market at the end of December 2022 in anticipation of 1Q CY2023 sales of 500,000 pounds. Sales are scheduled with the US DOE (300,000 pounds) and with existing customers (200,000 pounds). The payment for the acquired 200,000 pounds of U₃O₈ has been scheduled to occur in 1Q CY2023 to align with the sales receipt from the US DOE.

The Company also holds a previously executed purchase contract with pricing below current spot market levels to acquire new inventory of 200,000 pounds late in 1Q CY2023.

The Company is forecasting a uranium inventory balance of 210,000 pounds of U₃O₈ at converter accounts as of 31 March 2023 after 1Q CY2023 sales of 500,000 pounds and purchases of 200,000 pounds.

Management Change

After the end of the quarter on 30 January 2023 the Company announced that current Non-Executive Director Rachel Rees has been appointed to the position of Executive Director Finance and Corporate Affairs, including the roles of Chief Financial Officer and Joint Company Secretary

During the quarter Peninsula's Chief Financial Officer and Joint Company Secretary, Mr Ron Chamberlain, advised the Company of his resignation from his full-time role with Peninsula to take up an opportunity with another company.

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Issue of Shares under Long Term Incentive Scheme

5,994,134 shares were issued on 13 December 2022 under the Company's Long Term Incentive Scheme as part of the normal annual grant process.

Issue of Shares under Short Term Incentive Scheme

As approved by shareholders at the 2022 Annual General Meeting, 1,528,253 shares were issued to the Managing Director/Chief Executive Officer, in lieu of cash, as elected by the MD/CEO, on 13 December 2022 under the Company's Short Term Incentive Scheme as part of the normal annual award process.

Issue of Options under Long Term Incentive Scheme

As approved by shareholders at the 2022 Annual General Meeting 4,100,000 options were issued to Non-Executive Directors on 8 December 2022 under the Company's Long Term Incentive Scheme. These options have an exercise price of A\$0.30, vest in three equal tranches on 29 November 2023, 29 November 2024, and 29 November 2025, and expire on 26 November 2027.

Expiry of Options issued in 2018

During the quarter 4,925,000 options issued in 2018 to Directors and staff of the Company expired unexercised.

Withdrawal from Karoo Projects in South Africa

During the quarter the Company continued the processes to apply for closure of the Karoo Projects with the South African regulators which are expected to take some time to finalise.

The Company continues to progress the sale of the remaining freehold farmland previously held in the Karoo Basin, with proceeds still expected to be sufficient to cover any remaining exit costs. One farm was sold during the quarter for ZAR 4 371 000 (US\$0.257 million), which leaves only two farms remaining to be sold.

2022 Annual General Meeting

Peninsula held its 2022 Annual General Meeting on 29 November and all resolutions put to the meeting were carried by way of poll.

Cash Position

The Company's available cash at the end of the quarter was **US\$25.1 million**.

The Company has disclosed US\$0.222 million in payments to related parties and their associates for the December 2022 quarter in Item 1.2(a) of the Appendix 5B. These amounts relate to payments made under the Managing Director/Chief Executive Officer employment agreement and Non-Executive Director fees as described within the audited Remuneration Report section of the Company's most recently published 2022 Annual Report.

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FOR FURTHER INFORMATION, PLEASE CONTACT:

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This release has been approved by the Board.

ABOUT PENINSULA ENERGY LIMITED

Peninsula Energy Limited (PEN) is an ASX-listed uranium mining company which has made the decision to restart its 100% owned Lance Projects in Wyoming, USA. This is the final step in a project transformation initiative at Lance to transition from an alkaline ISR operation to a low pH ISR operation. Lance is one of the largest uranium development projects in the United States and once in production, Peninsula will be in strong position to supply a growing market, as the importance of nuclear power continues to gain momentum and support, as a critical part of the green energy mix.

¹ Lance Projects Classified JORC-Compliant Resource Estimate (U₃O₈) as at 31 December 2021

Resource Classification	Tonnes Ore (M)	U ₃ O ₈ kg (M)	U ₃ O ₈ lbs (M)	Grade (ppm U ₃ O ₈)	Location
Measured	3.4	1.7	3.7	491	Wyoming, USA
Indicated	11.1	5.5	12.1	496	Wyoming, USA
Inferred	36.2	17.2	37.8	474	Wyoming, USA
Total	50.7	24.3	53.7	480	

JORC Table 1 included in an announcement to the ASX released on 14 November 2018: "Revised Lance Projects Resource Tables". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Competent Persons Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves at the Lance Projects is based on information compiled by Mr Benjamin Schiffer. Mr Schiffer is a Registered Professional Member of the Society of Mining, Metallurgy and Exploration (Member ID #04170811). Mr Schiffer is a professional geologist employed by independent consultant WWC Engineering. Mr Schiffer has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

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SCHEDULE OF INTERESTS IN MINING TENEMENTS AT 31 DECEMBER 2022

Lance Projects, Wyoming, USA

Location / Project Name	Tenement	Percentage
Private Land (FEE) – Surface Access Agreement	Approx. 2,397 acres	100%
Private Land (FEE) – Mineral Rights	Approx. 10,361 acres	100%
Federal Mining Claims – Mineral Rights	Approx. 18,789 acres	100%
Federal Surface – Grazing Lease	Approx. 40 acres	100%
State Leases – Mineral Rights	Approx. 11,544 acres	100%
State Leases – Surface Access	Approx. 314 acres	100%
Strata Owned – Surface Access	Approx. 315 acres	100%

Karoo Projects, South Africa

Permit Number/ Name	Holding Entity	Initial Rights Date	Renewed/ Signed/ Validity (e.g. Valid, Under PR Application, Under Mining Right Application, Closure Submitted/Issued)	Area (km ²)	Current Expiry	Commodity Group	Original PR Status
EC 07 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected – Environmental Closure Application Submitted	48	10/06/2015	U, Mo	Expired
EC 08 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected - Environmental Closure Application Submitted	47	10/06/2015	U, Mo	Expired
EC 12 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected - Environmental Closure Application Submitted	36	10/06/2015	U, Mo	Expired
EC 13 PR	Tasman Lukisa JV	14/11/2006	MR Application rejected - Environmental Closure Application Submitted	69	10/06/2015	U, Mo	Expired
WC 25 PR	Tasman Lukisa JV	17/10/2007	MR Application lapsed - Rehabilitation Completed - Environmental Closure Application being prepared	7	12/11/2014	U, Mo	Expired
WC 33 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed – Environmental Closure Application Submitted	68	04/07/2016	U, Mo	Expired
WC 34 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	34	01/08/2015	U, Mo	Expired
WC 47 PR	Tasman Lukisa JV	04/09/2008	MR Application lapsed - Environmental Closure Application Submitted	36	04/07/2015	U, Mo	Expired
WC 59 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	40	01/08/2015	U, Mo	Expired
WC 60 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	56	01/08/2015	U, Mo	Expired

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WC 61 PR	Tasman Lukisa JV	01/12/2006	MR Application lapsed - Environmental Closure Application Submitted	69	01/08/2015	U, Mo	Expired
WC 95 PR	Tasman-Lukisa JV	17/04/2007	Closure Submitted	5	23/03/2013	U, Mo	Expired
WC 152 PR	Tasman-Lukisa JV	01/12/2006	MR Application lapsed - Rehabilitation Completed - Environmental Closure Application being prepared	189	04/07/2016	U, Mo	Expired
WC 156 PR	Tasman Lukisa JV	30/11/2006	MR Application lapsed - Environmental Closure Application Submitted	69	04/07/2014	U, Mo	Expired
WC 187 PR	Tasman Lukisa JV	01/12/2006	Closure Submitted	24	01/08/2014	U, Mo	Expired
WC 168 PR	Tasman Pacific Minerals	13/12/2006	Closure Submitted	332	05/05/2014	U, Mo	Expired
WC 170 PR	Tasman Pacific Minerals	13/12/2006	Closure Submitted	108	05/05/2014	U, Mo	Expired
EC 28 PR	Tasman Pacific Minerals	15/11/2006	Closure Submitted	225	26/03/2015	U, Mo	Expired
NC 330 PR	Tasman Pacific Minerals	08/06/2007	Closure Submitted	481	19/04/2019	U, Mo	Relinquished
NC 331 PR	Tasman Pacific Minerals	08/06/2007	Closure Submitted	205	17/11/2018	U, Mo	Relinquished
NC 347 PR	Tasman Pacific Minerals	08/06/2007	Closure Submitted	634	17/11/2018	U, Mo	Relinquished